SECTION 08 30 00

COILING MEDIUM DUTY OVERHEAD DOORS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Medium Duty Coiling Service Doors.

1.2 RELATED SECTIONS

A. Section 05 10 00 - Structural Metal Framing.

B. Section 06 10 00 - Rough Carpentry.

C. Section 09 90 00 - Paints and Coatings.

D. Section 16 05 00 - Basic Electrical Materials and Methods.

1.3 REFERENCES

A. ASTM A653/A653M; Standard Specification for Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

B. ASTM A 229/A 229M: Standard Specification for Steel Wire, Oil-Tempered for Mechanical Springs.

C. ASTM B 221: Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes

1.4 SUBMITTALS

A. Submit under provisions of Section 01 30 00.

B. Shop Drawings: Indicate opening dimensions and required tolerances, jamb connection details, anchorage spacing, hardware locations, installation details, and special conditions.

C. Provide information on components, application, hardware and accessories.

D. Closeout Submittals:
1. Installation, operation and maintenance data.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Manufacturer shall provide a door system capable of withstanding positive and negative design loads as required by local building code.

B. Installer Qualifications: Installer shall be authorized and qualified to install overhead door systems on the type and scope of project specified.

1.6 PERFORMANCE REQUIREMENTS

A. Design doors to withstand positive and negative wind loads as calculated in accordance with applicable building code.
   1. Design Wind Load: _____
   2. Test Wind Load: 1.5 times design wind load.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Store and dispose of all materials in accordance with federal, state and local laws.

1.8 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.9 WARRANTY

A. Provide an original copy of the manufacturer's limited warranty against manufacturing defects and product workmanship.
   1. Medium Duty Rolling Steel Door Warranty: 1 year.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Janus International, 135 Janus International Blvd, Temple GA 30179; Toll Free Tel: 866.562.2580; Fax: 770.562.1991; www.janusintl.com

B. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.

2.2 MATERIALS

A. Galvanized Steel Sheet:
   1. Galvanized commercial steel, (cs)

B. Aluminum alloys
   1. Extruded aluminum shapes

C. Steel spring wire

2.3 COILING MEDIUM DUTY OVERHEAD DOORS

A. Construction:
   1. Curtain material: 24 gauge pre-finished galvanized steel mounted to barrel assembly by factory; staked or windlocked to prevent lateral movement.
      a) Curtain Profile: Flat, non-insulated, 2.63 inches high by .66 inches deep.
      b) Curtain Profile: Curved, non-insulated, 1.97 inches high by .53 inches deep.

2. Wind locks: As required per design and windload requirements.
3. Bottom bar: Extruded aluminum shape with tubular compression type bottom astragal.
4. Barrel Assembly: Galvanized spiral wound 12 inch O.D. tube. Deflection under full load not to exceed .003 inches per foot of span. Operates with shielded bearings mounted to torsion shaft.
5. Springs: Stress relieved, grease packed and mounted on steel torsion shafts,
   a) Spring Rating: Minimum 20,000 cycles
6. Jamb Brackets: Triangulated and gusseted galvanized steel shapes mounting to structural jamb surface to support barrel and curtain assembly.
7. Tension Mechanism: Externally accessible for full range of curtain balance adjustment.
8. Hood: Optional. 24 gauge half-hexagonal galvanized, prefinished steel to cover barrel and curtain assembly and protect from debris and damage. Intermediate hood support(s) furnished as required per design.
9. Guides: Formed steel rectangular shapes for face mount to steel, gypsum, wood or masonry.
   a) Polyethylene guide runners mounted to guide contact surfaces to provide wear channel for curtain operation.
   b) Flared bellmouths to insure smooth curtain transition from coil to guide.
   c) Removable stops prevent curtain over-travel.
10. Weatherstripping: Exterior vinyl guide seal, bottom bar astragal and header seal.
11. Operation:
    a) Manual lift-up operation.
    b) Chain hoist with gear reduction.
    c) Motor operation with motor size, voltage, phase and gear reduction appropriate to door size per manufacturer design and operational specifications.
        1) Motor operation: Add pneumatic/electric safety reversing edge.
        2) Motor operation: Add Miller two wire electric safety reversing edge.
        3) Motor operation: Add 4 wire fail-safe electric safety reversing edge.
        4) Motor operation: Add non-contact photo electric eyes safety reverse.
        5) Motor operation with bottom bar locks: Add interlock switch for each lock location.
        6) Motor operation: Add keyed access three button Open/Close/Stop control station in lieu of standard three button station.
        7) Motor operation: Add radio receiver with ____ transmitter(s).
        8) Motor operation: Add coaxial cable exterior antenna for metal building.
12. Emergency Operation with Motor:
    a) Manual lift-up operation in case of power failure.
    b) Chain hoist operation in case of power failure
13. Locking Mechanism:
    a.) Two plated steel slide bolt locks with padlock provisions, coil side.
14. Finishes: Curtain galvanized with baked enamel primer and polyester finish coats. Guides and jamb brackets are galvanized and aluminum bottom bar is mill finish.

PART 3 EXECUTION

3.1 INSTALLATION

A. Install assembly in accordance with manufacturer's instructions.

B. Anchor to adjacent construction without distortion or stress.

C. Fit and align assembly including hardware, plumb, level and square to ensure smooth operation.

D. Position header and jamb weatherstripping to contact door when closed; secure in position.

E. Make wiring connections between power supply and operator and between operator and controls where required.

3.2 ADJUSTING

A. Adjust closures to operate smoothly throughout full operating range.

3.3 DEMONSTRATION

A. Demonstrate proper operation to Owner or Owner’s representative.

END OF SECTION